

paper limits interest to those who have a special research interest in this area.

In the final section, Dr. Nolan D. C. Lewis gives an excellent clinical description of the depersonalization syndrome. Two papers deal with environmental deprivation, the first by Theodore Schaefer, Jr., and Niles Bernick gives a critique of the long literature on sensory deprivation and concludes that suggestion and expectation may be the most important factors in eliciting the subjective experience reported as the sensory deprivation syndrome. Dr. Ronald Melzack discusses the effect of restricting the environment of young puppies on later behavior. This paper, as well as the paper on "perceptual defense" by Charles Eriksen, a paper dealing with differential recognition of neutral and emotionally loaded words, both describe their results under the rubric of perceptual change. While such findings as those of Melzack that dogs raised in restricted environments have a difficulty in inhibiting irrelevant responses and do not respond appropriately to sexual stimulation are significant findings, they do not seem necessarily related to perception per se. Dr. Dement's paper on perception during sleep presents another excellent review of the experimental literature on the physiological state of dreaming (referred to as paradoxical sleep, dreaming sleep or REMS sleep) and differentiates hypnagogic states from dreaming in terms of the lack of significant autonomic and other physiological changes accompanying the former as compared with the latter.

The index to this volume is scanty relative to the wealth of data presented. This, the form of presentation of most of the papers, and the nature of the topics discussed will make this book of most interest to the specialist and researcher who is already acquainted with the literature in this area.

EDWARD M. ORNITZ, M.D.

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AN OUTLINE OF RADIOGRAPHIC FINDINGS IN MULTIPLE-SYSTEM DISEASE—John H. Simonton, M.D., Assistant Professor of Radiology (in residence), University of California at Los Angeles and Assistant Chief Radiologist, Department of Radiology, Los Angeles County Harbor General Hospital, Torrance, California; and Robert C. Jamison, M.D., Assistant Professor of Radiology (in residence), University of California at Los Angeles and Radiologist in Charge of Diagnosis, Department of Radiology, Los Angeles County Harbor General Hospital, Torrance, Calif. Charles C Thomas, Publisher, Springfield, Ill., 1965. 261 pages, \$11.75.

The clinical and radiologic findings in generalized systemic diseases often presents, to the student and practicing physician alike, a bewildering array of abnormalities, difficult to organize into any easy to remember pattern.

This small book presents an amazing quantity of information of more than 90 systemic diseases, with an extensive list of radiological findings for each disease, preceded by a brief description of the clinical findings. Each disease is a separate article, presented in alphabetical order, using the most common name of the disease. Where there are several common names, cross reference is usually provided. The articles include pertinent background information including incidence, etiology, clinical findings, complications and differential diagnosis. Statistics are presented when available, such as age and sex incidence, and the relative frequency of specific clinical and radiological abnormalities. The x-ray findings are usually presented by systems (skeletal, G.I., G.U., etc.). Separate "orientation" articles discuss groups of diseases such as connective tissue diseases, metabolic bone disease, histiocytosis, etc. A short list of select current references are found at the end of each article.

A list of radiological findings are quite complete and accurate and up to date. The clinical information is brief and to the point. Some criticism may be levelled at the non-uniform presentation, for example similar type information is presented under a variety of sub-headings such as "Background," "keynote," "clinical findings," "clinical notes," "definition," "clinical background," "clinical setting," "clinical features," etc. Also, it might have proven slightly more useful if more disease synonyms were listed for cross reference, particularly for the students who may not be aware of all the names of some of these systemic diseases. There are no illustrations and some readers may feel a few selected illustrations would have added value to the book. These criticisms, however, are minor relative to the overall value of the book, which fills a definite need. Radiologists in particular will find it very useful, if not an indispensable volume, but it will also prove valuable to other specialists, residents, and medical students.

WARREN M. RUSSELL, M.D.

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ANIMAL BEHAVIOUR AND DRUG ACTION—Ciba Foundation Symposium (jointly with the Co-ordinating Committee for Symposia on Drug Action). Editors for the Ciba Foundation, A. V. S. De Reuck, M.Sc., D.I.C., and Julie Knight, B.A. Editor for the Co-ordinating Committee, Hannah Steinberg, Ph.D. Little, Brown and Company, Boston, Mass., 1964. 491 pages, \$13.00.

This is a report on a Ciba Foundation Symposium in London in March 1963, on the general subject of psychopharmacology of animals. It is composed of three divisions. The first division is a series of formal papers given in four sessions under the headings Behavioural Analysis of Drug Action, Neurophysiological and Biochemical Correlates of Behavioural Effects of Drugs, Factors which Modify Effects of Drugs on Behaviour and Relevance of Behavioural Effects of Drugs in Animals to Effects in Man.

The second division is a transcription of informal discussions entitled Intermediation between Administered Drugs and Behavioural Effects and is composed of four sessions entitled The Biochemical Approach, The Electrophysiological Approach, The Neurophysiological Approach and The Pharmacological Approach. The last division is also made up of transcribed reports of informal discussions on the general subject of The Relevance of Behavioural Effects of Drugs in Animals to their Effects in Man, and this division consists of two sessions entitled Extrapolation from Animals to Man and Clinical Implications. At each of the 10 sessions from three to five reports were presented by individuals or groups actively at work in the fields of neurophysiology, neurochemistry, neuropharmacology and psychopharmacology in both Great Britain and America. The sessions were presided over by such well known British medical biologists as Sir John H. Gaddum, W. S. Feldberg, A. Sumnerfield, Sir Aubrey Lewis, J. M. Barnes and M. Shepherd.

The role of memory in behavior is emphasized and efforts are made at a scientific description of memory. The language of the book, although technical, is easily understood by those of us who may not have experience in the field in which the author works. Apparently, each paper was aimed at a general, rather than a technically restricted audience. It is of special interest to experimental and clinical pharmacologists and neurologists, psychologists and psychiatrists, but may be read with profit by any one concerned with natural phenomena.

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